INTERSTATE COMMERCE COMMISSION

: WASHINGTON

INVESTIGATION NO. 3020

THE DELAWARE AND HUDSON RAILROAD CORPORATION

REPORT IN RE ACCIDENT

NEAR THE GLEN, N. Y., ON

AUGUST 26, 1946

#### SUMLARY

Railroad:

Delaware and Hudson

Date:

August 26, 1946

Location:

The Glen, N. Y.

Kind of accident:

Head-end collision

Trains involved:

Passenger

: Passenger

Train numbers:

181

: Passenger Extra

503 South

Engine numbers:

451

: 503

Consists:

4 cars

; 7 cars

Estimated speeds:

35 m. p. h. : 5 m. p. h.

Operation:

Timetable and train orders

Track:

Single; 1° curve; level

Weather:

Clear

Time:

9:32 a. m.

Casualties:

1 killed: 99 injured

Cause:

Failure to obey meet order

Recommendation:

That the Delaware and Hudson Railroad Corporation install an adequate block system on the line on which this acci-

dent occurred

#### INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 3020

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION PEPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE DELAWARE AND HUDSON RAILROAD CORPORATION

October 21, 1946

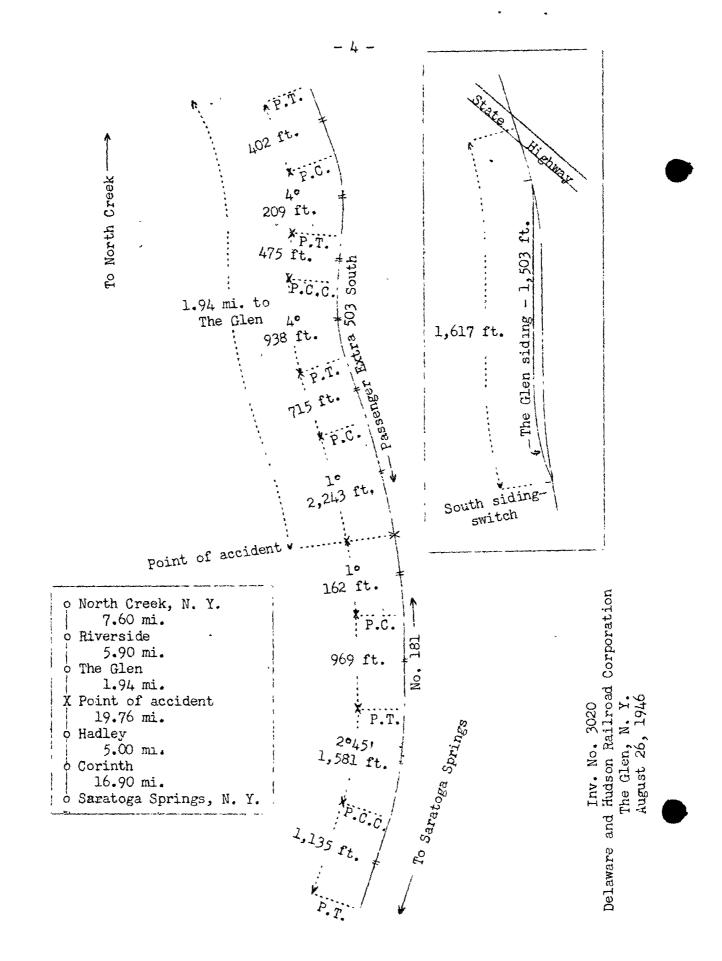
Accident near The Glen, N. Y., on August 26, 1946, caused by failure to obey a meet order.

# REPORT OF THE COMMISSION

#### PATTERSON, Commissioner:

On August 26, 1946, there was a head-end collision between two passenger trains on the line of the Delaware and Hudson Railroad Corporation near The Glen, N. Y., which resulted in the death of 1 train-service employee, and the injury of 90 passengers, 1 railway mail clerk, 1 express messenger and 7 train-service employees. This accident was investigated in conjunction with a representative of the New York Public Service Commission.

<sup>&</sup>lt;sup>1</sup>Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



#### Location of Accident and Method of Operation

This accident occurred on that part of the Saratoga-Champlain Division extending between Saratoga Springs and North Creek, N. Y., 57.1 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At The Glen, 43.6 miles north of Saratoga Springs, a siding 1,503 feet in length parallels the main track on the west. There is no station building at The Glen. The south switch of this siding is 1,617 feet south of a highway grade crossing, where traffic is received and discharged. The accident occurred on the main track 1.94 miles south of the south siding-switch. From the south there are, in succession, a tangent 1,135 feet in length, a compound curve to the left, the maximum curvature of which is 2045', 1,581 feet, a tangent 969 feet and a 1° curve to the left 162 feet to the point of accident and 2,243 feet northward. From the north there are, in succession, a tangent 402 feet in length, a 4<sup>c</sup> curve to the right 209 feet, a tangent 475 feet, a compound curve to the left, the maximum curvature of which is 40, 938 feet, a tangent 715 feet and the curve on which the accident occurred. At the point of accident the grade is level.

Operating rules read in part as follows:

73. Extra trains are inferior to regular trains.

90. \* \* \*

\* \* \*

Trains must stop clear of the switch used by the train to be met in going on the siding.

\* \* \*

FORMS OF TRAIN CRDERS.

FORM A. \* \* \* FIXING MEETING POINTS FOR OPPOSING TRAINS.

\* \* \*

Examples.

\* \* \*

(3.) No. 7 take siding meet No. 8 at D.

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Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner provided by the Rules.

The maximum authorized speed for the passenger trains involved was 45 miles per hour.

## Description of Accident

No. 181, a north-bound first-class passenger train, consisted of engine 451, one baggage car, one baggage-mail car and two coaches, in the order named. The first car was of steel construction, the second car was of steel-underframe construction, and the third and fourth cars were of wooden construction. At Corinth, 26.7 miles south of The Glen, the crew of this train received copies of train order No. 206 reading in part as follows:

\* \* \* No 181 take siding meet Psgr Extra 503 south at The Glen.

No. 181 departed from Corinth at 8:47 a.m., 6 minutes late, passed Hadley, the last open office, 21.7 miles south of The Glen, at 8:59 a.m., 7 minutes late, and while moving at an estimated speed of 35 miles per hour it collided with Passenger Extra 503 South at a point 1.94 miles south of the south siding switch at The Glen.

Passenger Extra 503 South, a south-bound passenger train, consisted of engine 503 and seven coaches. All cars were of steel construction. At Riverside, the last open office, 5.9 miles north of The Glen, the crew of this train received copies of train order No. 206. Passenger Extra 503 South departed from Riverside at 9:15 a.m., passed the clearance point of the south siding-switch at The Glen, where it was required to wait unless No. 181 was into clear on the siding, and while moving at an estimated speed of 5 miles per hour it collided with No. 181.

The engines of both trains and the first car of No. 181 were derailed and stopped upright and in line with the track. The rear end of the tender of each engine was raised above the rear truck, and the front end of each tender stopped against the cab of its engine. The front end of the first car of each train was raised above the front truck. The front ends and the cabs of both engines were badly damaged. The first car of each train was considerably damaged, and the second car of Passenger Extra 503 South and the second, third and fourth cars of No. 181 were slightly damaged.

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The weather was clear at the time of the accident, which occurred about 9:32 a.m.

The engineer of No. 181 was killed. The conductor, the front brakeman, the flagman and the fireman of No. 181, and the fireman, the front brakeman and the flagman of Passenger Extra 503 South were injured.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 8.01 trains.

#### Discussion

The crew of each train held copies of a train order which established The Glen as the meeting point between No. 181 and Passenger Extra 503 South and included the instruction for No. 181 to take siding at the meeting point. Under the rules, Passenger Extra 503 South was required to stop clear of the south siding-switch at The Glen unless No. 181 was into clear on the siding. These trains collided at a point 1.94 miles south of the south siding-switch at The Glen.

As No. 181 was approaching the point where the accident occurred the speed was about 45 miles per hour. The fireman was on the engine deck tending the fire. The first he knew of anything being wrong was when he heard the exhaust of the air valve as a result of the brakes being applied in emergency, and he observed the engineer place the reverse lever in position for backward movement and close the throttle lever. Then the fireman looked forward from the left side of the gangway, saw the approaching train about 100 feet distant, and jumped from the engine. The engineer was killed. The speed of No. 181 was about 35 miles per hour when the collision occurred.

The crew of Passenger Extra 503 South received copies of the meet order at Riverside, 5.9 miles north of The Glen, about 20 minutes prior to the time the accident occurred. At that time each member of the crew read the train order, These employees, and a trainmaster who was on the train, understood that their train was required to stop clear of the south siding-switch at The Glen unless No. 181 was into clear on the siding. As Passenger Extra 503 South was approaching The Glen the engineer made a service brake-pipe reduction to reduce the speed of the train in compliance with a speed restriction of 20 miles per hour over the highway Then the speed was increased to about 30 grade-crossing. miles per hour, and the enginemen overlooked the provisions of the order until the engine was about 1.5 miles south of the south siding-switch. Then the engineer made a service brake-pipe reduction to stop the train. The speed had

been reduced to about 15 miles per hour when the enginemen saw smoke from the engine of No. 181, and the engineer moved the brake valve to emergency position. The speed of Passenger Extra 503 South was about 5 miles per hour when the collision occurred. The trainmaster and the members of the train crew were concerned with the comfort of the passengers, and they did not realize that their train had passed the meeting point until the collision occurred.

Because of an embankment and vegetation on the inside of the curve on which the accident occurred, the view of the point where the accident occurred from an engine moving in either direction is materially restricted.

Trains are operated in this territory by timetable and train orders only. The book of operating rules of this carrier contains manual-block rules which, among other things, provide for blocking of opposing trains, but these rules are not in effect in this territory. If an adequate block system had been in use in this territory, these opposing trains would not have been permitted to occupy the same block simultaneously.

### Cause

It is found that this accident was caused by failure to obey a meet order.

## Recommendation

It is recommended that the Delaware and Hudson Railroad Corporation install an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this twenty-first day of October, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL, Secretary.